



## Education E-newsletter September 2013

Fall has arrived and with it comes back-to-school news and educational opportunities.

### News

**Water quality data available to schools:** Water quality data on lakes throughout Wisconsin is collected by WDNR staff, consultants, USGS and Citizen Lake Monitoring Network (CLMN) volunteers. This data is available to the public and would be a great teaching tool for area schools. Teachers can choose water quality data from area lakes that are familiar to students to teach basic limnology.

Data encompass a variety of variables, years, and lakes. CLMN is a network of volunteers throughout the state who collect water clarity and temperature profiles as well as total phosphorus and chlorophyll samples. Volunteers also monitor their lake for invasive species and native aquatic plant species. If you are interested in using/viewing the data, please visit <http://dnr.wi.gov/lakes/CLMN/>.

If you would like to know more about the CLMN program and data collection, please contact Sandy Wickman at [sandra.wickman@wisconsin.gov](mailto:sandra.wickman@wisconsin.gov).



**Are you using the right plants for cell study?** Biology and botany teachers – there are new plant choices for studying cell structure and cytoplasmic streaming. In the past, many teachers have used a plant known as “elodea” or “anacharis” for these labs. In many cases the plant being used was actually *Egeria densa*, a prohibited invasive plant in Wisconsin. *Egeria densa* has been a regulated prohibited species since 2009, but many retailers have only recently learned that they cannot sell this plant, so the change may seem new. Regulations state that prohibited invasive plants cannot be possessed, transferred, transported, or introduced without a permit. Luckily, there are alternative plants biology teachers can use. *Elodea canadensis* is one great native alternative to study. Learn more about the plants here:

<http://dnr.wi.gov/topic/invasives/documents/SS1116ElodeaGuide.pdf>

Questions? Contact Chrystal Schreck, DNR Invasive Species Outreach and Education Specialist at: [Chrystal.Schreck@Wisconsin.gov](mailto:Chrystal.Schreck@Wisconsin.gov) or (608) 264 – 8590.

Learn more about invasive species on our website at <http://dnr.wi.gov/topic/Invasives/> or <http://dnr.wi.gov> keyword “invasives”



**Attack Pack: a grab-and-go teaching tool.** The Aquatic Invaders Attack Pack is a rucksack filled with materials (including a new Wisconsin Project WET Invaders activity poster) to help teach students and other groups about Great Lakes aquatic invasive species (AIS), the problems they cause and what can be done about them. Each pack includes preserved specimens of some of the most problematic AIS in the Great Lakes, rugged plastic fact sheets, a classroom guide and a USB flash drive containing 10 lesson plans created by the Great Lakes Sea Grant Network. The Pack will be delivered to your local library via the Library Delivery Network of Wisconsin.



The perfect gift that gives year-round....Wisconsin Natural Resources magazine makes an excellent teaching tool with spectacular photos and stories that educate and entertain. The magazine is the perfect gift for colleagues, teaching assistants, classroom volunteers, friends, and family. New this year, your subscription will include the 2014 Friends of Wisconsin State Parks annual calendar – full of award-winning photographs of our state’s most beautiful parks and trails. The December 2013 magazine is packed full of great information along with the calendar.

Be sure and order now at <http://dnr.wi.gov/wnrmag/> to include the December 2013 in your gift subscriptions.



## **Educational Opportunities**

**Educators from schools and nature centers are invited to apply for a free groundwater sand tank model and workshop.** If you provide environmental educational programs for kids in grades 6 – 12 and want a hands-on tool that shows how groundwater moves, this model may be for you. Twenty four models will be given away at three workshops located around the state. The workshops will be taught by staff from the Central Wisconsin Groundwater Center, Wisconsin Geological and Natural History Survey and Wisconsin DNR. To be eligible to receive a model, two teachers from a school or nature center must complete the application form (available at: <http://dnr.wi.gov/education/educatorresources/groundwater/> ) describing how they will use the model. Money is available for substitute teachers. The deadline for applications is November 5, 2013.

This year workshops will be held at:

January 15: WGNHS Core Lab, 211 Blue Mounds Street, Mount Horeb, WI 53572;  
January 29: Bookworm Gardens, 1415 Campus Drive, Sheboygan, WI 53081; and  
February 12: Northern Great Lakes Visitor Center, 29270 County Highway G, Ashland,  
WI 54806.



**Greening Your Math Program: Mathematics in the Forest** - LEAF and the UWSP Treehaven Field Station are hosting this hands-on teaching workshop for math teachers. The workshop focuses on outdoor application of algebra, geometry and trigonometry. In addition to inspiring ideas, you'll also get mathematics-related LEAF lesson materials to take back to your classroom.

Participants will use geometry to understand the mathematics behind making and using a Biltmore stick to measure tree diameter. After exploring the mathematics behind the Biltmore stick, they will actually make their own Biltmore stick, and use it to collect data in the forest. They will also use simple trig to understand the mathematics of an angle gauge, then make an angle gauge and use it in the forest to estimate basal area per acre. Other topics will include population estimates and land measurement.

Graduate credit from UWSP is being offered as NRES 741, and scholarships are available. For registration forms and information flyers please visit our website.  
[http://www.uwsp.edu/cnr-ap/leaf/Pages/professional\\_development.aspx](http://www.uwsp.edu/cnr-ap/leaf/Pages/professional_development.aspx)



**Forestry Education for the Wisconsin K-12 Classroom** will be held in a hybrid format this fall, with a face-to-face meeting on November 9th. Get the convenience of online learning with the benefit of an interactive day spent with peers. LEAF's hybrid workshop teaches you key forestry principles, demonstrates teaching techniques, and gives you great activities so you can easily integrate forestry education into your indoor or outdoor classroom. Our excellent instructors tailor each workshop to meet the needs of participants. You will receive a grade-specific unit of our highly-regarded LEAF Wisconsin K-12 Forestry Lesson Guide and additional materials.

Graduate credit from UWSP is being offered as NRES 740, and scholarships are available. For registration forms and information flyers please visit our website.  
[http://www.uwsp.edu/cnr-ap/leaf/Pages/professional\\_development.aspx](http://www.uwsp.edu/cnr-ap/leaf/Pages/professional_development.aspx)



**Plant the seed for a green and healthy school!** Free fall workshops are available for teachers, administrators and school staff.

The Green & Healthy Schools Wisconsin Program is conducting FREE workshops in several locations this fall to educate school staff, teachers and administrators about how to incorporate the program into their schools. Green & Healthy Schools Wisconsin is web-based, self-paced, voluntary, and available to all Wisconsin PK-12 public and private schools. The program is administered through a partnership between the Department of Natural Resources, Department of Public Instruction, and Wisconsin Center for Environmental Education.

The workshops will connect GHS program staff with area schools and bring local resources and school officials together. Training will provide an in-depth introduction to the program, and how to receive recognition for demonstrated achievement specifically focusing on:

- Community involvement;
- Energy;
- Environmental and sustainability education;
- Environmental health;
- Health and wellness;
- Recycling & waste management;
- School site;
- Transportation; and
- Water.

Workshop participants will also have the opportunity to learn how to connect with area businesses, nature centers, non-profit organizations and local governments. Educators will leave with a plan for making their individual schools green and healthy.

Learn more about this program and start the process by attending a free one-day workshop! All workshops are held from 9am-3pm.

October 10th – Ashland

October 11th – Turtle Lake

October 15th – Platteville

October 24th – Whitewater

October 29th – Gillett

November 7th – Neenah

November 14th – Pewaukee

Lunch will be provided as part of the workshop as well as an expense stipend after the workshop of \$100 per attendee (up to 4 individuals from each school) to be used to cover expenses of attending the workshop – substitute fees, mileage, etc. – or expenses related to Green & Healthy Schools efforts thanks to a grant from the US Environmental Protection Agency.

Visit [GHSWisconsin.org](http://bit.ly/fall13ghs) to learn more. Registration is available at: <http://bit.ly/fall13ghs>  
Space is limited, so sign up early!

For more information, contact: Caitlin Henning, 608-267-7622.

